

# BIRCHCLIFF

## ENERGY

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### BIRCHCLIFF ENERGY LTD. ANNOUNCES UNAUDITED 2021 FULL-YEAR AND FOURTH QUARTER RESULTS AND 2021 RESERVES HIGHLIGHTS

**Calgary, Alberta (February 9, 2022)** – Birchcliff Energy Ltd. (“**Birchcliff**” or the “**Corporation**”) (TSX: BIR) is pleased to announce its unaudited 2021 full-year and fourth quarter financial and operational results and highlights from its independent reserves evaluation effective December 31, 2021.

“2021 was a record year for all of Birchcliff’s cash flow metrics. We generated record annual adjusted funds flow<sup>(1)</sup> of \$539.7 million, record annual free funds flow<sup>(1)</sup> of \$309.3 million and record annual net income to common shareholders of \$310.5 million, with annual average production of 78,520 boe/d. As a result of the significant free funds flow we generated in the year, we were able to reduce our total debt<sup>(2)</sup> at December 31, 2021 by \$262.6 million (34%) from year-end 2020, double our common share dividend and return capital to shareholders through share buybacks. These achievements speak to the continued strong performance of our assets and the benefits of our low-cost operating structure,” commented Jeff Tonken, Chief Executive Officer of Birchcliff.

Mr. Tonken continued: “Birchcliff was able to grow its proved developed producing (“**PDP**”) reserves at year-end 2021 by 5% over 2020, with top-tier PDP F&D costs<sup>(3)</sup> of \$5.88/boe, which has resulted in Birchcliff’s PDP reserves having an operating netback recycle ratio<sup>(4)</sup> of 3.7x, highlighting the profitability of our business.”

“For 2022, we remain committed to maintaining capital discipline, maximizing free funds flow generation and significantly reducing indebtedness. As set forth in our press release dated January 19, 2022, we expect to generate approximately \$590 million of adjusted funds flow in 2022, with F&D capital expenditures between \$240 million and \$260 million, resulting in \$330 million to \$350 million of free funds flow. Free funds flow generated in 2022 will be primarily allocated towards debt reduction and we are targeting total debt of \$175 million to \$195 million at December 31, 2022<sup>(5)</sup>.”

#### 2021 Full-Year Highlights

- Generated record annual adjusted funds flow of \$539.7 million, or \$2.03 per basic common share<sup>(4)</sup>, an increase of 192% and 194%, respectively, from 2020. Cash flow from operating activities was \$515.4 million, a 174% increase from 2020.
- Delivered record annual free funds flow of \$309.3 million, or \$1.16 per basic common share<sup>(4)</sup>.
- Achieved average production of 78,520 boe/d, a 3% increase from 2020. Liquids accounted for 21% of Birchcliff’s total production in 2021, as compared to 23% in 2020.
- Significantly reduced total debt at year-end to \$499.4 million, a reduction of \$262.6 million (34%) from \$762.0 million at December 31, 2020.
- Earned record annual net income to common shareholders of \$310.5 million, or \$1.17 per basic common share, as compared to a net loss to common shareholders of \$62.0 million and \$0.23 per basic common share in 2020.
- Achieved an operating netback<sup>(4)</sup> of \$21.50/boe, a 107% increase from 2020.
- Realized an operating expense<sup>(3)</sup> of \$3.19/boe, an 8% increase from 2020.
- Successfully executed the Corporation’s 2021 capital program, bringing on production a total of 33 (33.0 net) wells. F&D capital expenditures were \$230.5 million in 2021.
- Purchased 5,242,700 common shares pursuant to its normal course issuer bid in 2021 at an average price of \$6.00 per common share for an aggregate gross cost of \$31.5 million.

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(1) Non-GAAP financial measure. See “*Non-GAAP and Other Financial Measures*”.

(2) Capital management measure. See “*Non-GAAP and Other Financial Measures*”.

(3) Supplementary financial measure. See “*Non-GAAP and Other Financial Measures*”.

(4) Non-GAAP ratio. See “*Non-GAAP and Other Financial Measures*”.

(5) Assumes the following commodity prices and exchange rate in 2022: an average WTI price of US\$76.00/bbl; an average WTI-MSW differential of CDN\$5.00/bbl; an average AECO price of CDN\$3.50/GJ; an average Dawn price of US\$3.90/MMBtu; an average NYMEX HH price of US\$4.00/MMBtu; and an exchange rate (CDN\$ to US\$1) of 1.26. See “*Advisories – Forward-Looking Statements*”.

#### Q4 2021 Highlights

- Generated record quarterly adjusted funds flow of \$193.6 million, or \$0.73 per basic common share, an increase of 191% and 192%, respectively, from Q4 2020. Cash flow from operating activities was \$196.1 million, a 175% increase from Q4 2020.
- Delivered record quarterly free funds flow of \$157.9 million, or \$0.60 per basic common share.
- Achieved average production of 78,716 boe/d, which was comparable to Q4 2020. Liquids accounted for 20% of Birchcliff's total production in Q4 2021, as compared to 24% in Q4 2020.
- Earned quarterly net income to common shareholders of \$106.1 million, or \$0.40 per basic common share, an increase of 163% and 167%, respectively, from Q4 2020.
- Achieved an operating netback of \$27.53/boe, a 112% increase from Q4 2020.
- Realized an operating expense of \$3.50/boe, a 16% increase from Q4 2020.
- Increased its quarterly common share dividend by 100% to \$0.01 per share from \$0.005 per share for the quarter ended December 31, 2021.
- Purchased 2,042,700 common shares pursuant to its normal course issuer bid in Q4 2021 at an average price of \$6.91 per common share for an aggregate gross cost of \$14.1 million.

Birchcliff anticipates filing its annual information form and audited financial statements and related management's discussion and analysis for the year ended December 31, 2021 on March 16, 2022.

*This press release contains forward-looking statements within the meaning of applicable securities laws. For further information regarding the forward-looking statements contained herein, see "Advisories – Forward-Looking Statements". With respect to the disclosure of Birchcliff's production contained in this press release, see "Advisories – Production". In addition, this press release uses various "non-GAAP financial measures", "non-GAAP ratios", "supplementary financial measures" and "capital management measures" as such terms are defined in National Instrument 52-112 – Non-GAAP and Other Financial Measures Disclosure ("NI 52-112"). Non-GAAP financial measures and non-GAAP ratios are not standardized financial measures under GAAP and might not be comparable to similar financial measures disclosed by other issuers where similar terminology is used. For further information regarding the non-GAAP and other financial measures used in this press release, see "Non-GAAP and Other Financial Measures".*

## 2021 UNAUDITED FINANCIAL AND OPERATIONAL HIGHLIGHTS

	Three months ended December 31,		Twelve months ended December 31,	
	2021	2020	2021	2020
<b>OPERATING</b>				
Average production				
Light oil (bbls/d)	2,604	3,566	2,899	4,415
Condensate (bbls/d)	5,330	6,658	5,715	5,824
NGLs (bbls/d)	7,570	8,285	7,705	7,650
Natural gas (Mcf/d)	379,275	360,839	373,217	351,068
<b>Total (boe/d)</b>	<b>78,716</b>	<b>78,649</b>	<b>78,520</b>	<b>76,401</b>
Average realized sales price (CDN\$) <sup>(1)(2)</sup>				
Light oil (per bbl)	92.79	49.56	79.24	42.39
Condensate (per bbl)	98.66	52.90	85.65	48.03
NGLs (per bbl)	38.24	16.16	30.54	13.62
Natural gas (per Mcf)	5.52	2.93	4.29	2.49
<b>Total (per boe)</b>	<b>40.02</b>	<b>21.87</b>	<b>32.53</b>	<b>18.90</b>
<b>NETBACK AND COST (\$/boe)<sup>(2)</sup></b>				
Petroleum and natural gas revenue <sup>(1)</sup>	40.02	21.88	32.53	18.90
Royalty expense	(3.93)	(0.90)	(2.66)	(0.65)
Operating expense	(3.50)	(3.03)	(3.19)	(2.95)
Transportation and other expense <sup>(3)</sup>	(5.06)	(4.94)	(5.18)	(4.93)
<b>Operating netback<sup>(3)</sup></b>	<b>27.53</b>	<b>13.01</b>	<b>21.50</b>	<b>10.37</b>
G&A expense, net	(1.45)	(1.11)	(0.99)	(0.88)
Interest expense	(0.72)	(1.20)	(1.00)	(0.93)
Realized gain (loss) on financial instruments	1.37	(1.63)	(0.75)	(2.13)
Other cash income	0.01	0.12	0.07	0.17
<b>Adjusted funds flow<sup>(3)</sup></b>	<b>26.74</b>	<b>9.19</b>	<b>18.83</b>	<b>6.60</b>
Depletion and depreciation expense	(7.44)	(7.49)	(7.42)	(7.60)
Unrealized gain (loss) on financial instruments	-	5.84	2.94	(1.27)
Other (expense) income <sup>(4)</sup>	(0.01)	0.30	0.03	(0.16)
Dividends on preferred shares	(0.23)	(0.26)	(0.24)	(0.27)
Income tax recovery (expense)	(4.41)	(2.00)	(3.31)	0.48
<b>Net income (loss) to common shareholders</b>	<b>14.65</b>	<b>5.58</b>	<b>10.83</b>	<b>(2.22)</b>
<b>FINANCIAL</b>				
Petroleum and natural gas revenue (\$000s) <sup>(1)</sup>	289,806	158,283	932,406	528,505
Cash flow from operating activities (\$000s)	196,142	71,431	515,369	188,180
Adjusted funds flow (\$000s) <sup>(5)</sup>	193,649	66,509	539,733	184,526
Per basic common share (\$) <sup>(3)</sup>	0.73	0.25	2.03	0.69
Net income (loss) to common shareholders (\$000s)	106,102	40,407	310,489	(62,008)
Per basic common share (\$)	0.40	0.15	1.17	(0.23)
End of period basic common shares (000s)	264,790	265,943	264,790	265,943
Weighted average basic common shares (000s)	265,197	265,940	265,990	265,936
Dividends on common shares (\$000s)	2,646	1,330	6,639	10,968
Dividends on preferred shares (\$000s)	1,717	1,905	6,905	7,654
F&D capital expenditures (\$000s) <sup>(6)</sup>	35,726	41,291	230,479	287,967
Total capital expenditures (\$000s) <sup>(5)</sup>	36,075	28,778	232,480	276,785
Long-term debt (\$000s)	500,870	731,372	500,870	731,372
Total debt (\$000s) <sup>(7)</sup>	499,397	761,951	499,397	761,951

(1) Excludes the effects of financial instruments but includes the effects of physical delivery contracts.

(2) Average realized sales prices and the component values of netback and cost set out in the table above are supplementary financial measures unless otherwise indicated. See "Non-GAAP and Other Financial Measures".

(3) Non-GAAP ratio. See "Non-GAAP and Other Financial Measures".

(4) Includes non-cash items such as compensation, accretion, amortization of deferred financing fees and other gains and losses.

(5) Non-GAAP financial measure. See "Non-GAAP and Other Financial Measures".

(6) See "Advisories – F&D Capital Expenditures".

(7) Capital management measure. See "Non-GAAP and Other Financial Measures".

## 2021 RESERVES, F&D COSTS, RECYCLE RATIO AND NET ASSET VALUE HIGHLIGHTS

- PDP reserves at December 31, 2021 were 217.1 MMboe, a 5% increase from 206.6 MMboe at December 31, 2020. After adding back 2021 actual production of 28.7 MMboe<sup>(6)</sup>, Birchcliff added 39.2 MMboe of PDP reserves.
- Birchcliff delivered top-tier PDP F&D costs of \$5.88/boe and an operating netback recycle ratio of 3.7x, both attributed to the high-quality nature of Birchcliff's Montney/Doig assets and the efficient execution of its 2021 capital program.
- The following table sets forth Birchcliff's F&D costs per boe for its PDP, total proved and total proved plus probable reserves for 2021, 2020 and 2019, including future development costs ("FDC"):

F&D costs (\$/boe) <sup>(1)</sup>	2021 <sup>(2)</sup>	2020 <sup>(3)</sup>	2019 <sup>(4)</sup>	3-Year Average
Proved Developed Producing	\$5.88	\$10.16	\$8.65	\$7.97
Total Proved	\$10.50	\$7.08	\$7.84	\$8.25
Total Proved Plus Probable	\$13.57	\$6.66	\$6.22	\$6.98

(1) Supplementary financial measure. See "Non-GAAP and Other Financial Measures". See "Advisories – Oil and Gas Metrics" for a description of the methodology used to calculate F&D costs. Birchcliff's F&D capital expenditures were \$230.5 million in 2021 and it had negligible capital adds associated with acquisitions and dispositions in 2021 resulting in FD&A costs approximately equal to its F&D costs for PDP, proved and proved plus probable reserves categories.

(2) Reflects the 2021 decrease in FDC from 2020 of \$25.4 million on a proved and \$94.1 million on a proved plus probable basis.

(3) Reflects the 2020 decrease in FDC from 2019 of \$147.2 million on a proved and \$32.7 million on a proved plus probable basis.

(4) Reflects the 2019 increase in FDC from 2018 of \$135.7 million on a proved and \$193.7 million on a proved plus probable basis.

- The following table sets forth Birchcliff's F&D recycle ratios, on an operating and adjusted funds flow basis, for its PDP, total proved and total proved plus probable reserves for 2021 and 2020, including FDC:

	Operating Netback Recycle Ratio <sup>(1)(2)</sup>		Adjusted Funds Flow Recycle Ratio <sup>(1)(3)</sup>	
	2021	2020	2021	2020
Proved Developed Producing	3.7	1.0	3.2	0.6
Total Proved	2.0	1.5	1.8	0.9
Total Proved Plus Probable	1.6	1.6	1.4	1.0

(1) Non-GAAP ratio. See "Non-GAAP and Other Financial Measures".

(2) Birchcliff's operating netback was \$21.50/boe in 2021, as compared to \$10.37/boe in 2020.

(3) Birchcliff's adjusted funds flow was \$18.83/boe in 2021, as compared to \$6.60/boe in 2020.

- The following table sets forth Birchcliff's net asset value for its PDP, total proved and total proved plus probable reserves at December 31, 2021:

(\$000s, except per share amounts)	Proved Developed Producing		Total Proved		Total Proved Plus Probable	
	2021	2020	2021	2020	2021	2020
Reserves, NPV10% <sup>(1)</sup>	2,490,206	1,869,446	4,966,920	3,736,237	6,367,284	4,831,693
Total debt <sup>(2)</sup>	(499,397)	(761,951)	(499,397)	(761,951)	(499,397)	(761,951)
Preferred shares <sup>(3)</sup>	(88,268)	(89,930)	(88,268)	(89,930)	(88,268)	(89,930)
Value of unexercised securities <sup>(4)</sup>	50,392	-	50,392	-	50,392	-
<b>Net asset value<sup>(5)(6)</sup></b>	<b>1,952,933</b>	<b>1,017,565</b>	<b>4,429,647</b>	<b>2,884,356</b>	<b>5,830,011</b>	<b>3,979,812</b>
<b>Net asset value (per share)<sup>(6)(7)</sup></b>	<b>\$6.89</b>	<b>\$3.83</b>	<b>\$15.62</b>	<b>\$10.85</b>	<b>\$20.56</b>	<b>\$14.96</b>

(1) Represents the net present value of the future net revenue (before income taxes, discounted at 10%) of Birchcliff's PDP, total proved and total proved plus probable reserves, as applicable, as estimated by Deloitte LLP ("Deloitte") effective December 31, 2021 and December 31, 2020, using forecast prices and costs. The estimated net present value of the future net revenue of Birchcliff's reserves at December 31, 2021 increased by 33% in each of its PDP, total proved and total proved plus probable reserves categories as compared to December 31, 2020, primarily due to an improved commodity price forecast.

(2) Capital management measure. See "Non-GAAP and Other Financial Measures".

(3) Represents the redemption value of the Corporation's Series A and Series C preferred shares.

(4) Represents the value of unexercised in-the-money stock options and performance warrants outstanding at December 31, 2021. For 2020, the value of unexercised securities was negligible. The closing trading price on the Toronto Stock Exchange of Birchcliff's common shares on December 31, 2021 and December 31, 2020 was \$6.46 and \$1.77, respectively.

(5) Excludes any value from undeveloped land and seismic.

(6) Net asset value is a non-GAAP financial measure and net asset value per share is a non-GAAP ratio. See "Non-GAAP and Other Financial Measures".

(7) For 2021, based on 283.6 million common shares, which includes 264.8 million basic common shares outstanding at December 31, 2021 and 18.8 million dilutive common shares from unexercised in-the-money stock options and performance warrants outstanding at December 31, 2021. For 2020, based on 265.9 million basic common shares outstanding at December 31, 2020.

- The net asset value of Birchcliff's total proved reserves at December 31, 2021 was \$15.62 per common share, a discount of 59% to its common share trading price on February 8, 2022, which demonstrates the significant value opportunity presented by Birchcliff.

(6) Consists of 1,058.1 Mbbls of light oil, 2,086.0 Mbbls of condensate, 2,812.3 Mbbls of NGLs and 136,224.2 MMcf of natural gas.

## FULL-YEAR AND Q4 2021 UNAUDITED FINANCIAL AND OPERATIONAL RESULTS

### Production

Birchcliff's 2021 production averaged 78,520 boe/d, a 3% increase from 2020 and slightly below guidance of 79,000 to 80,000 boe/d. Birchcliff's production averaged 78,716 boe/d in Q4 2021, which was comparable to Q4 2020. Birchcliff's full-year and Q4 2021 production was positively impacted by incremental production volumes from the new Montney/Doig light oil and condensate-rich natural gas wells brought on production in 2021. Annual average production was negatively impacted by: (i) natural production declines; (ii) extreme heat conditions in the summer months of 2021, which reduced production processing capabilities in the field; and (iii) a force majeure event at a third-party fractionation facility and a significant outage on a third-party NGLs pipeline system experienced in late Q3 and early Q4 2021.

Liquids accounted for 21% of total production in 2021, as compared to 23% in 2020, with a liquids-to-gas ratio in 2021 of 43.7 bbls/MMcf (53% high-value light oil and condensate). For Q4 2021, liquids accounted for 20% of Birchcliff's total production, as compared to 24% in Q4 2020, with a liquids-to-gas ratio in Q4 2021 of 40.9 bbls/MMcf (51% high-value light oil and condensate). The decreases in the liquids production weighting were primarily due to the Corporation targeting horizontal natural gas wells in liquids-rich zones in the Pouce Coupe and Gordondale areas in 2021 and natural production declines from light oil and condensate-rich natural gas wells brought on-stream in 2020, including from the 14-well pad brought on production in Q3 2020.

### Adjusted Funds Flow and Cash Flow From Operating Activities

Birchcliff achieved record adjusted funds flow in 2021 of \$539.7 million, or \$2.03 per basic common share, a 192% and 194% increase, respectively, from \$184.5 million and \$0.69 per basic common share in 2020. Birchcliff's Q4 2021 adjusted funds flow was \$193.6 million, or \$0.73 per basic common share, a 191% and 192% increase, respectively, from \$66.5 million and \$0.25 per basic common share in Q4 2020. Birchcliff's full-year 2021 adjusted funds flow was lower than its guidance of \$575 million, primarily due to lower than anticipated full-year average realized natural gas and liquids sales prices.

The increases in adjusted funds flow were primarily due to higher reported petroleum and natural gas revenue, partially offset by a higher royalty expense, both of which were largely impacted by a 72% and 83% increase in the average realized sales price received for Birchcliff's production in the full-year and Q4 2021, respectively, as compared to 2020. Birchcliff's average realized sales price benefited from the significant increases in benchmark oil and natural gas prices in the full-year and Q4 2021. See *"Full-Year and Q4 2021 Unaudited Financial and Operational Results – Commodity Prices"*.

Birchcliff's cash flow from operating activities in 2021 was \$515.4 million, a 174% increase from \$188.2 million in 2020. Birchcliff's Q4 2021 cash flow from operating activities was \$196.1 million, a 175% increase from \$71.4 million in Q4 2020. The reason for the increases is consistent with the explanation for the increases to adjusted funds flow.

### Free Funds Flow

Birchcliff delivered record annual free funds flow in 2021 of \$309.3 million, or \$1.16 per basic common share. In 2020, Birchcliff's F&D capital expenditures exceeded its adjusted funds flow by \$103.4 million. Birchcliff's Q4 2021 free funds flow was \$157.9 million, or \$0.60 per basic common share, a 527% and 567% increase, respectively, from \$25.2 million and \$0.09 per basic common share in Q4 2020. Birchcliff's full-year 2021 free funds flow was below its guidance of \$345 million to \$350 million, primarily due to lower than anticipated full-year adjusted funds flow.

### Net Income (Loss) to Common Shareholders

Birchcliff earned record net income to common shareholders of \$310.5 million, or \$1.17 per basic common share in 2021, as compared to a net loss to common shareholders of \$62.0 million and \$0.23 per basic common share in 2020. The change to a net income position was primarily due to higher adjusted funds flow and an unrealized mark-to-market gain on financial instruments, partially offset by higher income tax expense in 2021. Birchcliff recorded an unrealized mark-to-market gain on financial instruments of \$84.2 million in 2021, as compared to an unrealized mark-to-market loss on financial instruments of \$35.4 million in 2020.

In Q4 2021, Birchcliff earned net income to common shareholders of \$106.1 million, or \$0.40 per basic common share, a 163% and 167% increase, respectively, from \$40.4 million and \$0.15 per basic common share in Q4 2020. The increase to net income to common shareholders was primarily due to higher adjusted funds flow, partially offset by a lower unrealized mark-to-market gain on financial instruments and higher income tax expense in Q4 2021. Birchcliff had a negligible unrealized mark-to-market gain on financial instrument in Q4 2021, as compared to an unrealized mark-to-market gain on financial instruments of \$42.2 million in Q4 2020.

## Operating Netback and Selected Cash Costs

Birchcliff's 2021 operating netback was \$21.50/boe, a 107% increase from \$10.37/boe in 2020. In Q4 2021, Birchcliff's operating netback was \$27.53/boe, a 112% increase from \$13.01/boe in Q4 2020. The increases were primarily due to higher per boe petroleum and natural gas revenue, partially offset by a higher per boe royalty expense in full-year and Q4 2021.

The following table sets forth Birchcliff's selected cash costs for the periods indicated:

(\$/boe)	Three months ended December 31,			Twelve months ended December 31,		
	2021	2020	% Change	2021	2020	% Change
Royalty expense <sup>(1)</sup>	3.93	0.90	337	2.66	0.65	309
Operating expense <sup>(1)</sup>	3.50	3.03	16	3.19	2.95	8
Transportation and other expense <sup>(2)</sup>	5.06	4.94	2	5.18	4.93	5
G&A expense, net <sup>(1)</sup>	1.45	1.11	31	0.99	0.88	13
Interest expense <sup>(1)</sup>	0.72	1.20	(40)	1.00	0.93	8

(1) Supplementary financial measure. See "Non-GAAP and Other Financial Measures".

(2) Non-GAAP financial measure. See "Non-GAAP and Other Financial Measures".

Royalty expense per boe increased by 309% and 337% from full-year and Q4 2020, respectively, primarily due to a significant increase in the average realized sales price received for Birchcliff's production. Birchcliff's full-year royalty expense was within its guidance of \$2.60/boe to \$2.80/boe.

Operating expense per boe increased by 8% and 16% from full-year and Q4 2020, respectively, primarily due to higher power and fuel costs and an increase in municipal property taxes. In 2020, the Alberta Government provided municipal property tax relief in response to the COVID-19 pandemic, which was discontinued in 2021. Birchcliff's full-year operating expense was within its guidance of \$3.00/boe to \$3.20/boe.

G&A expense per boe increased by 13% and 31% from full-year and Q4 2020, respectively, primarily due to higher employee-related expenses, which included employee retirement costs incurred in Q4 2021, and an increase in general business expenditures.

Interest expense per boe increased by 8% and decreased by 40% from full-year and Q4 2020, respectively. Interest expense fell significantly throughout 2021 as a result of the Corporation's focus on reducing bank debt and improving its overall financial position.

## Debt

Total debt at December 31, 2021 was \$499.4 million, a decrease of 34% from \$762.0 million at December 31, 2020. Birchcliff's 2021 year-end debt was above its guidance of \$450 million to \$455 million primarily due to lower than anticipated full-year average realized natural gas and liquids sales prices and the additional cost associated with repurchasing common shares under the Corporation's normal course issuer bid, which was unbudgeted.

At December 31, 2021, Birchcliff had long-term bank debt under its revolving term credit facilities of \$500.9 million (December 31, 2020: \$731.4 million) from available credit facilities of \$850.0 million (December 31, 2020: \$1.0 billion), leaving \$341.2 million of unutilized credit capacity after adjusting for outstanding letters of credit and unamortized fees. Birchcliff's credit facilities do not contain any financial maintenance covenants and do not mature until May 11, 2024.

## Commodity Prices

The following table sets forth the average benchmark commodity index prices and exchange rate for the periods indicated:

	Three months ended December 31,			Twelve months ended December 31,		
	2021	2020	% Change	2021	2020	% Change
Light oil – WTI Cushing (US\$/bbl)	79.78	42.57	87	68.70	38.91	77
Light oil – MSW (Mixed Sweet) (CDN\$/bbl)	96.12	49.57	94	80.67	43.52	85
Natural gas – NYMEX HH (US\$/MMBtu) <sup>(1)</sup>	5.83	2.66	119	3.88	2.08	87
Natural gas – AECO 5A Daily (CDN\$/GJ)	4.41	2.50	76	3.44	2.11	63
Natural gas – AECO 7A Month Ahead (US\$/MMBtu) <sup>(1)</sup>	3.93	2.10	87	2.84	1.68	69
Natural gas – Dawn Day Ahead (US\$/MMBtu) <sup>(1)</sup>	4.65	2.30	102	3.62	1.88	93
Natural gas – ATP 5A Day Ahead (CDN\$/GJ)	4.74	2.78	71	4.03	2.05	97
Exchange rate (CDN\$ to US\$1)	1.2598	1.3035	(3)	1.2537	1.3413	(7)
Exchange rate (US\$ to CDN\$1)	0.7938	0.7672	3	0.7976	0.7455	7

(1) See “Advisories - MMBtu Pricing Conversions”.

## Marketing and Natural Gas Market Diversification

Birchcliff’s physical natural gas sales exposure primarily consists of the AECO, Dawn and Alliance markets. In addition, the Corporation has various financial instruments outstanding that provide it with exposure to NYMEX HH pricing.

The following table details Birchcliff’s effective sales, production and average realized sales price for natural gas and liquids for Q4 2021, after taking into account the Corporation’s financial instruments:

Three months ended December 31, 2021						
Market	Effective sales (CDN\$000s)	Percentage of total sales (%)	Effective production (per day)	Percentage of total natural gas production (%)	Percentage of total corporate production (%)	Effective average realized sales price (CDN\$)
AECO <sup>(1)(2)(3)</sup>	40,079	12	83,965 Mcf	22	18	5.19/Mcf
Dawn <sup>(4)</sup>	88,932	28	156,618 Mcf	41	33	6.17/Mcf
NYMEX HH <sup>(1)(2)(5)</sup>	96,760	30	138,692 Mcf	37	29	7.58/Mcf
<b>Total natural gas<sup>(1)</sup></b>	<b>225,771</b>	<b>70</b>	<b>379,275 Mcf</b>	<b>100</b>	<b>80</b>	<b>6.47/Mcf</b>
Light oil	22,231	7	2,604 bbls		3	92.79/bbl
Condensate	48,377	15	5,330 bbls		7	98.66/bbl
NGLs	26,635	8	7,570 bbls		10	38.24/bbl
<b>Total liquids</b>	<b>97,243</b>	<b>30</b>	<b>15,504 bbls</b>		<b>20</b>	<b>68.18/bbl</b>
<b>Total corporate<sup>(1)</sup></b>	<b>323,014</b>	<b>100</b>	<b>78,716 boe</b>		<b>100</b>	<b>44.60/boe</b>

- (1) Effective sales is a non-GAAP financial measure and effective average realized sales price is a non-GAAP ratio. See “Non-GAAP and Other Financial Measures”.
- (2) AECO sales and production that effectively received NYMEX HH pricing under Birchcliff’s long-term physical NYMEX/AECO 7A basis swap contracts has been included as effective sales and production in the NYMEX HH market. Birchcliff sold physical AECO 7A basis swaps for 5,000 MMBtu/d at an average contract price of NYMEX HH less US\$1.205/MMBtu during Q4 2021.
- (3) Birchcliff has short-term physical sales agreements with third-party marketers to sell and deliver into the Alliance pipeline system. All of Birchcliff’s short-term physical Alliance sales and production during Q4 2021 received AECO premium pricing and have therefore been included as effective sales and production in the AECO market.
- (4) Birchcliff has agreements for the firm service transportation of an aggregate of 175,000 GJ/d of natural gas on TransCanada PipeLines’ Canadian Mainline, whereby natural gas is transported to the Dawn trading hub in Southern Ontario.
- (5) NYMEX HH sales and production includes financial and physical AECO 7A basis swaps for 152,500 MMBtu/d at an average contract price of NYMEX HH less US\$1.226/MMBtu during Q4 2021. Birchcliff’s effective average realized sales price for NYMEX HH of CDN\$7.58/Mcf (US\$5.47/MMBtu) was determined on a gross basis before giving effect to the average NYMEX HH/AECO 7A contract basis price of CDN\$1.70/Mcf (US\$1.226/MMBtu). After giving effect to the NYMEX HH/AECO 7A basis contract price, Birchcliff’s effective average realized net sales price for NYMEX HH was CDN\$5.88/Mcf (US\$4.25/MMBtu) in Q4 2021.

The following table sets forth Birchcliff's sales, production, average realized sales price, transportation costs and natural gas sales netback by natural gas market for the periods indicated, before taking into account the Corporation's financial instruments:

Three months ended December 31, 2021							
	Natural gas sales <sup>(1)</sup> (CDN\$000s)	Percentage of natural gas sales (%)	Natural gas production (Mcf/d)	Percentage of natural gas production (%)	Average realized natural gas sales price <sup>(1)(2)</sup> (CDN\$/Mcf)	Natural gas transportation costs <sup>(2)(3)</sup> (CDN\$/Mcf)	Natural gas sales netback <sup>(2)(4)</sup> (CDN\$/Mcf)
AECO	85,230	44	185,870	49	4.98	0.42	4.56
Dawn	88,932	46	156,618	41	6.17	1.47	4.70
Alliance <sup>(5)</sup>	18,391	10	36,787	10	5.43	-	5.43
<b>Total</b>	<b>192,553</b>	<b>100</b>	<b>379,275</b>	<b>100</b>	<b>5.52</b>	<b>0.82</b>	<b>4.70</b>
Three months ended December 31, 2020							
	Natural gas sales <sup>(1)</sup> (CDN\$000s)	Percentage of natural gas sales (%)	Natural gas production (Mcf/d)	Percentage of natural gas production (%)	Average realized natural gas sales price <sup>(1)(2)</sup> (CDN\$/Mcf)	Natural gas transportation costs <sup>(2)(3)</sup> (CDN\$/Mcf)	Natural gas sales netback <sup>(2)(4)</sup> (CDN\$/Mcf)
AECO	44,556	46	172,817	48	2.80	0.39	2.41
Dawn	44,785	46	159,071	44	3.06	1.42	1.64
Alliance <sup>(5)</sup>	7,952	8	28,951	8	2.99	-	2.99
<b>Total</b>	<b>97,293</b>	<b>100</b>	<b>360,839</b>	<b>100</b>	<b>2.93</b>	<b>0.81</b>	<b>2.12</b>

(1) Excludes the effects of financial instruments but includes the effects of physical delivery contracts.

(2) Supplementary financial measure. See "Non-GAAP and Other Financial Measures".

(3) Reflects costs to transport natural gas from the field receipt point to the delivery sales trading hub.

(4) Natural gas sales netback denotes the average realized natural gas sales price less natural gas transportation costs.

(5) Birchcliff has short-term physical sales agreements with third-party marketers to sell and deliver into the Alliance pipeline system. Alliance sales are recorded net of transportation tolls.

### Capital Activities and Investment

Birchcliff's 2021 capital program was focused on the drilling of high-value, low-cost condensate-rich natural gas and light oil wells in Pouce Coupe and Gordondale. In addition, the Corporation directed funds towards key infrastructure enhancement projects to increase the overall throughput, reliability and safety of Birchcliff's operating assets. F&D capital expenditures were \$230.5 million in 2021, in-line with Birchcliff's guidance of \$225 million to \$230 million.

The following table summarizes the number of wells Birchcliff drilled and brought on production in 2021:

Area	Total wells drilled	Total wells brought on production <sup>(1)</sup>
<b>Pouce Coupe</b>		
Montney D1 horizontal natural gas wells	10	7
Montney D2 horizontal natural gas wells	3	3
Montney C horizontal natural gas wells	3	3
Basal Doig/Upper Montney horizontal natural gas wells	8	12
<b>Total – Pouce Coupe</b>	<b>24</b>	<b>25</b>
<b>Gordondale</b>		
Montney D1 horizontal natural gas wells	2	2
Montney D2 horizontal natural gas wells	1	1
Montney C horizontal natural gas wells	1	1
Montney D1 horizontal oil wells	2	2
Montney D2 horizontal oil wells	2	2
<b>Total – Gordondale</b>	<b>8</b>	<b>8</b>
<b>TOTAL – COMBINED</b>	<b>32</b>	<b>33</b>

(1) Does not include 5 (5.0 net) additional wells drilled in Q4 2021 as none of these wells were brought on production in 2021. Includes 6 (6.0 net) additional wells that were drilled in Q4 2020 and subsequently brought on production in 2021.

In 2021, Birchcliff was able to realize significant cost savings in the execution of its capital program as compared to its internal estimates. The Corporation utilized large multi-well pads that enabled its operational teams to create efficiencies through scale and repeatability, which resulted in a 12% reduction in drilling and completion costs per lateral metre and a reduction in cycle times from spud to onstream of 23% as compared to 2020.



As a result of Birchcliff's strong operational performance and realized cost savings during the year, the Corporation was able to construct two new pads and drill 5 (5.0 net) additional wells (the 13-29 pad) in 2021 to prepare for its 2022 drilling program, while remaining in-line with its 2021 F&D capital expenditures guidance.

In 2021, Birchcliff successfully delineated and commercialized the Montney C interval into the Gordondale area at its 4-well pad (05-07) using multi-well cube-style development. The continued success of the lower Montney cube (Montney C, D1 and D2) provides Birchcliff with significant additional drilling inventory for multi-well cube-style drilling, which lowers the Corporation's per well costs and increases its reservoir hydrocarbon capture.

### Operations Update

Birchcliff currently has 2 drilling rigs at work drilling a 10-well pad in Pouce Coupe. Birchcliff has successfully completed its 6-well 13-29 pad in Pouce Coupe, which was drilled in late Q4 2021 and early January 2022. Wells were drilled in 2 different intervals (4 in the Montney D1 and 2 in the Basal Doig/Upper Montney) and targeted condensate-rich natural gas. Flowback operations have commenced and the wells are expected to be onstream in early March.

### 2021 YEAR-END RESERVES

Birchcliff retained Deloitte, independent qualified reserves evaluator, to evaluate and prepare a report on 100% of Birchcliff's light crude oil and medium crude oil, conventional natural gas, shale gas and NGLs reserves. The reserves data set forth below at December 31, 2021 is based upon the evaluation by Deloitte with an effective date of December 31, 2021 as contained in the report of Deloitte dated February 9, 2022 (the "**2021 Reserves Report**"). The forecast commodity prices, inflation and exchange rates utilized were computed using the average of forecasts from Deloitte, McDaniel & Associates Consultants Ltd. ("**McDaniel**"), GLJ Petroleum Consultants Ltd. ("**GLJ**") and Sproule Associates Ltd. ("**Sproule**") effective January 1, 2022 (the "**2021 IQRE Price Forecast**").

The 2021 Reserves Report has been prepared in accordance with the standards contained in the Canadian Oil and Gas Evaluation Handbook (the "**COGE Handbook**") and National Instrument 51-101 – *Standards of Disclosure for Oil and Gas Activities* ("**NI 51-101**").

For additional information regarding the presentation of Birchcliff's reserves disclosure contained herein, see "*Presentation of Oil and Gas Reserves*" and "*Advisories*" in this press release. The reserves data provided in this press release presents only a portion of the disclosure required under NI 51-101. The disclosure required under NI 51-101 will be contained in Birchcliff's Annual Information Form for the year ended December 31, 2021, which is expected to be filed on the System for Electronic Document Analysis and Retrieval ([www.sedar.com](http://www.sedar.com)) on March 16, 2022. In certain of the tables below, numbers may not add due to rounding.

### Reserves Summary

The following table summarizes the estimates of Birchcliff's gross reserves at December 31, 2021 and December 31, 2020, estimated using the forecast price and cost assumptions in effect as at the effective date of the applicable reserves evaluation:

#### Summary of Gross Reserves (Forecast Prices and Costs)

Reserves Category	December 31, 2021 (Mboe)	December 31, 2020 <sup>(1)</sup> (Mboe)	Change from December 31, 2020 (%)
Proved Developed Producing	217,145	206,606	5
Total Proved	689,941	699,067	(1)
Total Probable	331,927	341,410	(3)
Total Proved Plus Probable	1,021,868	1,040,477	(2)

(1) Deloitte prepared an evaluation with an effective date of December 31, 2020 as contained in the report of Deloitte dated February 10, 2021 (the "**2020 Reserves Report**"). Deloitte prepared the 2020 Reserves Report using the average of forecasts from Deloitte, McDaniel, GLJ and Sproule effective January 1, 2021 (the "**2020 IQRE Price Forecast**").

The following table sets forth Birchcliff's light crude oil and medium crude oil, conventional natural gas, shale gas and NGLs reserves at December 31, 2021, estimated using the 2021 IQRE Price Forecast:

**Summary of Reserves at December 31, 2021**  
(Forecast Prices and Costs)

Reserves Category	Light Crude Oil and Medium Crude Oil		Conventional Natural Gas		Shale Gas		NGLs <sup>(1)</sup>		Total Boe	
	Gross (Mbbbls)	Net (Mbbbls)	Gross (MMcf)	Net (MMcf)	Gross (MMcf)	Net (MMcf)	Gross (Mbbbls)	Net (Mbbbls)	Gross (Mboe)	Net (Mboe)
Proved										
Developed Producing	6,606	5,515	4,433	4,171	1,026,813	957,484	38,664	30,552	217,145	196,342
Developed Non-Producing	0	0	381	362	3,356	3,158	108	87	731	674
Undeveloped	11,204	9,678	2,763	2,517	2,430,315	2,256,114	55,349	45,195	472,066	431,311
Total Proved	17,810	15,193	7,577	7,050	3,460,484	3,216,756	94,121	75,833	689,941	628,327
Total Probable	12,103	9,855	4,569	4,289	1,593,344	1,458,630	53,505	41,737	331,927	295,412
Total Proved Plus Probable	29,913	25,048	12,146	11,338	5,053,827	4,675,386	147,627	117,570	1,021,868	923,739

(1) NGLs includes condensate.

**Net Present Values of Future Net Revenue**

The following table sets forth the net present values of future net revenue attributable to Birchcliff's reserves at December 31, 2021, estimated using the 2021 IQRE Price Forecast, before deducting future income tax expenses and calculated at various discount rates:

**Summary of Net Present Values of Future Net Revenue at December 31, 2021<sup>(1)</sup>**  
(Forecast Prices and Costs)

Reserves Category	Before Income Taxes Discounted At (%/year)					Unit Value Discounted at 10%/year (\$/boe) <sup>(2)</sup>
	0 (\$000s)	5 (\$000s)	10 (\$000s)	15 (\$000s)	20 (\$000s)	
Proved						
Developed Producing	4,111,347	3,126,078	2,490,206	2,076,243	1,791,078	12.68
Developed Non-Producing	12,274	8,225	6,033	4,706	3,836	8.96
Undeveloped	7,787,417	4,210,617	2,470,682	1,526,126	969,739	5.73
Total Proved	11,911,038	7,344,919	4,966,920	3,607,076	2,764,652	7.90
Total Probable	7,099,560	2,927,045	1,400,364	744,708	427,364	4.74
Total Proved Plus Probable	19,010,598	10,271,964	6,367,284	4,351,783	3,192,016	6.89

(1) Estimates of future net revenue, whether calculated without discount or using a discount rate, do not represent fair market value.

(2) Unit values are based on net reserves volumes.

## Pricing Assumptions

The following table sets forth the 2021 IQRE Price Forecast used in the 2021 Reserves Report:

### 2021 IQRE Price Forecast

Year	Crude Oil		Natural Gas <sup>(1)</sup>			NGLs				Currency Exchange Rate (US\$/CDN\$)	Price and Cost Inflation Rates (%)
	WTI at Cushing Oklahoma (US\$/bbl)	Edmonton City Gate (CDN\$/bbl)	Alberta AECO Average Price (CDN\$/Mcf)	Ontario Dawn Reference Point (CDN\$/Mcf)	NYMEX Henry Hub (US\$/Mcf)	Edmonton Ethane (CDN\$/bbl)	Edmonton Propane (CDN\$/bbl)	Edmonton Butane (CDN\$/bbl)	Edmonton Pentanes + Condensate (CDN\$/bbl)		
2022	71.88	85.43	3.58	4.59	3.89	11.12	43.71	57.34	90.21	0.80	0.0
2023	67.91	79.36	3.22	4.27	3.47	10.00	35.40	48.92	83.90	0.80	2.25
2024	65.42	76.07	3.07	3.91	3.23	9.54	33.88	46.93	80.67	0.80	2.0
2025	66.72	77.59	3.14	3.99	3.29	9.73	34.55	47.88	82.29	0.80	2.0
2026	68.05	79.13	3.20	4.06	3.35	9.94	35.24	48.83	83.94	0.80	2.0
2027	69.42	80.73	3.26	4.15	3.43	10.13	35.94	49.80	85.62	0.80	2.0
2028	70.81	82.33	3.33	4.24	3.49	10.34	36.67	50.80	87.33	0.80	2.0
2029	72.22	83.98	3.40	4.31	3.57	10.56	37.39	51.81	89.07	0.80	2.0
2030	73.67	85.66	3.46	4.40	3.63	10.77	38.14	52.85	90.84	0.80	2.0
2031	75.14	87.37	3.54	4.49	3.71	10.99	38.91	53.91	92.67	0.80	2.0
2032	76.64	89.12	3.60	4.59	3.78	11.21	39.69	54.98	94.53	0.80	2.0
2033	78.17	90.91	3.68	4.68	3.86	11.44	40.48	56.08	96.41	0.80	2.0
2034	79.74	92.72	3.75	4.78	3.93	11.66	41.29	57.20	98.34	0.80	2.0
2035	81.33	94.57	3.83	4.87	4.01	11.89	42.12	58.35	100.30	0.80	2.0
2036	82.96	96.46	3.90	4.98	4.09	12.14	42.96	59.52	102.31	0.80	2.0
2037	84.62	98.40	3.98	5.08	4.17	12.38	43.81	60.71	104.36	0.80	2.0
2038	86.31	100.36	4.06	5.18	4.25	12.63	44.70	61.92	106.45	0.80	2.0
2039	88.03	102.37	4.14	5.28	4.34	12.87	45.58	63.16	108.58	0.80	2.0
2040	89.79	104.42	4.22	5.38	4.43	13.14	46.50	64.43	110.75	0.80	2.0
2041	91.59	106.51	4.31	5.49	4.52	13.40	47.43	65.71	112.97	0.80	2.0
2042+	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.80	2.0

(1) 1 Mcf = 1 MMBtu.

## Reconciliation of Changes in Reserves

The following table sets forth the reconciliation of Birchcliff's gross reserves at December 31, 2021 as set forth in the 2021 Reserves Report, estimated using the 2021 IQRE Price Forecast, to Birchcliff's gross reserves at December 31, 2020 as set forth in the 2020 Reserves Report, estimated using the 2020 IQRE Price Forecast:

### Reconciliation of Gross Reserves from December 31, 2020 to December 31, 2021 (Forecast Prices and Costs)

Factors	Light Crude Oil and Medium Crude Oil (Mbbbls)	Conventional Natural Gas (MMcf)	Shale Gas (MMcf)	NGLs (Mbbbls)	Oil Equivalent (Mboe)
<b>GROSS TOTAL PROVED</b>					
<b>Opening balance December 31, 2020</b>	<b>19,568</b>	<b>8,463</b>	<b>3,509,528</b>	<b>93,167</b>	<b>699,067</b>
Extensions and Improved Recovery <sup>(1)</sup>	1,476	0	228,078	13,314	52,803
Technical Revisions <sup>(2)</sup>	(2,198)	(414)	(158,870)	(7,916)	(36,661)
Discoveries <sup>(3)</sup>	0	0	0	0	0
Acquisitions <sup>(4)</sup>	0	0	0	0	0
Dispositions <sup>(5)</sup>	0	0	0	0	0
Economic Factors <sup>(6)</sup>	22	225	17,274	453	3,392
Production <sup>(7)</sup>	(1,058)	(697)	(135,527)	(4,898)	(28,660)
<b>Closing balance December 31, 2021</b>	<b>17,810</b>	<b>7,577</b>	<b>3,460,484</b>	<b>94,121</b>	<b>689,941</b>
<b>GROSS TOTAL PROBABLE</b>					
<b>Opening balance December 31, 2020</b>	<b>11,776</b>	<b>5,269</b>	<b>1,619,891</b>	<b>58,774</b>	<b>341,410</b>
Extensions and Improved Recovery <sup>(1)</sup>	1,120	0	8,513	411	2,950
Technical Revisions <sup>(2)</sup>	(815)	(812)	(42,211)	(5,928)	(13,914)
Discoveries <sup>(3)</sup>	0	0	0	0	0
Acquisitions <sup>(4)</sup>	0	0	0	0	0
Dispositions <sup>(5)</sup>	0	0	0	0	0
Economic Factors <sup>(6)</sup>	22	113	7,150	248	1,481
Production <sup>(7)</sup>	0	0	0	0	0
<b>Closing balance December 31, 2021</b>	<b>12,103</b>	<b>4,569</b>	<b>1,593,344</b>	<b>53,505</b>	<b>331,927</b>
<b>GROSS TOTAL PROVED PLUS PROBABLE</b>					
<b>Opening balance December 31, 2020</b>	<b>31,344</b>	<b>13,732</b>	<b>5,129,420</b>	<b>151,941</b>	<b>1,040,477</b>
Extensions and Improved Recovery <sup>(1)</sup>	2,595	0	236,592	13,726	55,753
Technical Revisions <sup>(2)</sup>	(3,014)	(1,226)	(201,080)	(13,844)	(50,575)
Discoveries <sup>(3)</sup>	0	0	0	0	0
Acquisitions <sup>(4)</sup>	0	0	0	0	0
Dispositions <sup>(5)</sup>	0	0	0	0	0
Economic Factors <sup>(6)</sup>	45	337	24,424	702	4,873
Production <sup>(7)</sup>	(1,058)	(697)	(135,527)	(4,898)	(28,660)
<b>Closing balance December 31, 2021</b>	<b>29,913</b>	<b>12,146</b>	<b>5,053,827</b>	<b>147,627</b>	<b>1,021,868</b>

- (1) Additions to volumes resulting from capital expenditures for: (i) step-out drilling in previously discovered reservoirs; (ii) infill drilling in previously discovered reservoirs that were not drilled as part of an enhanced recovery scheme; and (iii) the installation of improved recovery schemes.
- (2) Positive or negative volume revisions to an estimate resulting from new technical data or revised interpretations on previously assigned volumes, performance and operating costs.
- (3) Additions to volumes in reservoirs where no reserves were previously booked.
- (4) Positive additions to volume estimates because of purchasing interests in oil and gas properties.
- (5) Reductions in volume estimates because of selling all or a portion of an interest in oil and gas properties.
- (6) Changes to volumes resulting from different price forecasts, inflation rates and regulatory changes.
- (7) Reductions in the volume estimates due to actual production.

Key highlights include the following:

#### **Extensions and Improved Recovery**

Reserves were added from the 33 wells that were brought on production pursuant to the Corporation's successful 2021 capital program, which also resulted in the assignment of reserves to potential future drilling locations offsetting the new wells. In addition, potential future drilling locations that were not included in 2020 Reserves Report were added based on available infrastructure capacity, superior economics and COGE Handbook development guidelines.

### Technical Revisions

- The technical revisions in all reserves categories for light and medium crude oil were mainly a result of higher gas-to-oil ratios for existing producing oil wells in the halo area in Gordondale and potential future drilling location adjustments based on offsetting well performance.
- The technical revisions in all reserves categories for conventional natural gas were mainly the result of the suspension of vertical wells in Gordondale and Pouce Coupe.
- The technical revisions in all reserves categories for shale gas were mainly a result of: (i) updated full-field development plan layouts with increased well lengths, combining multiple proved and probable potential future drilling locations; (ii) increased well performance of existing and potential future drilling locations in the Basal Doig/Upper Montney interval in Pouce Coupe; (iii) the prioritized removal of some proved and probable locations, which were replaced with potential future drilling locations (extensions) that either had superior reserves and economic value or where the available plant capacity precluded their development within the time frame mandated by the COGE Handbook; and (iv) adjustments to existing wells and offsetting potential future drilling locations.
- The technical revisions in all reserves categories for NGLs were mainly a result of: (i) a slight reduction of the C2+ recoveries at the AltaGas deep-cut sour gas processing facility in Gordondale (the “AltaGas Facility”) during full utilization; (ii) a reduction in associated shale gas volumes; and (iii) improved performance of the existing C3+ recoveries at the Corporation’s 100% owned and operated natural gas processing plant in Pouce Coupe (the “Pouce Coupe Gas Plant”).

### Economic Factors

The forecast prices for each product type were generally higher in the 2021 IQRE Price Forecast than the 2020 IQRE Price Forecast, which resulted in the economic limit at the end of a well’s life being achieved later, thereby increasing the reserves volumes in all reserves categories.

### Future Development Costs

FDC reflects Deloitte’s best estimate of what it will cost to bring the proved and proved plus probable reserves on production. Changes in forecast FDC occur annually as a result of development activities, acquisition and disposition activities and capital cost estimates. The following table sets forth development costs deducted in the estimation of Birchcliff’s future net revenue attributable to the reserves categories noted below:

#### Future Development Costs (Forecast Prices and Costs)

Year	Proved (\$000s)	Proved Plus Probable (\$000s)
2022	248,669	248,669
2023	361,763	429,051
2024	395,994	395,994
2025	761,449	802,997
2026	447,615	457,937
Thereafter	682,617	1,948,333
<b>Total undiscounted</b>	<b>2,898,106</b>	<b>4,282,980</b>

FDC for total proved reserves decreased by \$25.4 million to \$2.90 billion at December 31, 2021 from \$2.92 billion at December 31, 2020. FDC for proved plus probable reserves decreased by \$94.0 million to \$4.28 billion at December 31, 2021 from \$4.38 billion at December 31, 2020. The decreases in FDC for both proved and proved plus probable reserves were largely due to: (i) updated full-field development plan layouts with increased well lengths, combining multiple proved and probable potential future drilling locations; and (ii) a decrease in DCCET costs for (halo area) future locations in Gordondale to \$5.0 million per well from \$5.5 million per well at December 31, 2020. The decreases were partially offset by increases in future sustaining, maintenance and gas gathering infrastructure capital.

The FDC for both proved and proved plus probable reserves are primarily the capital costs required to drill, complete, equip and tie-in the net undeveloped locations. The estimates of FDC on a proved and proved plus probable basis also include approximately \$256 million (unescalated) for the continued expansion of the Pouce Coupe Gas Plant from the existing 340 MMcf/d to 660 MMcf/d of total throughput. The FDC for the expansions of the Pouce Coupe Gas Plant also include the costs of the related gathering pipelines and maintenance capital.

The following table sets forth the average cost to drill, complete, equip and tie-in a multi-stage fractured horizontal well as estimated by Deloitte:

Average Well Cost	December 31, 2021 (\$ millions)	December 31, 2020 (\$ millions)
Pouce Coupe	4.7	4.7
Gordondale	5.1	5.4

### Reserves Replacement

The following table sets forth Birchcliff's 2021 reserves replacement ratios on a F&D basis:

Reserves Category	2021 Reserves Replacement <sup>(1)</sup>
Proved Developed Producing	137%
Total Proved	68%
Total Proved Plus Probable	35%

(1) See "Advisories – Oil and Gas Metrics" for a description of the methodology used to calculate reserves replacement.

### Reserves Life Index

The following table sets forth Birchcliff's 2021 reserves life index:

Reserves Category	2021 Reserves Life Index <sup>(1)</sup>
Proved Developed Producing	7.5 years
Total Proved	23.9 years
Total Proved Plus Probable	35.4 years

(1) Based on a forecast production rate of 79,000 boe/d, which represents the mid-point of Birchcliff's annual average production guidance range for 2022. See "Advisories – Oil and Gas Metrics" for a description of the methodology used to calculate reserves life index.

### Reserves on the Montney/Doig Resource Play

The following table summarizes the estimates of reserves attributable to Birchcliff's horizontal wells on the Montney/Doig Resource Play as contained in the 2021 Reserves Report and the number of horizontal wells to which reserves were attributed:

#### Montney/Doig Resource Play Reserves Data<sup>(1)(2)</sup>

Reserves Category	Shale Gas (Bcf)		Light Crude Oil and Medium Crude Oil Combined (Mbbbls)		NGLs (Mbbbls)		Total (Mboe)		Existing Horizontal Wells and Potential Future Horizontal Well Locations			
	2021	2020	2021	2020	2021	2020	2021	2020	Gross		Net	
									2021	2020	2021	2020
Proved Developed Producing	1,016	948	6,575	9,262	37,790	35,889	213,712	203,109	472	437	469.7	434.7
Total Proved	3,448	3,492	17,779	19,539	93,155	92,137	685,673	693,661	965	958	962.4	952.6
Total Proved Plus Probable	5,038	5,106	29,874	31,309	146,334	150,528	1,015,869	1,032,884	1,205	1,219	1,201.4	1,206.6

(1) Estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation.

(2) At December 31, 2021, the estimated FDC for Birchcliff's reserves on its Montney/Doig Resource Play is \$2,895 million on a total proved basis (as compared to \$2,921 million at December 31, 2020) and \$4,278 million on a total proved plus probable basis (as compared to \$4,372 million at December 31, 2020).

### POTENTIAL FUTURE DRILLING OPPORTUNITIES ON THE MONTNEY/DOIG RESOURCE PLAY

Birchcliff's operations are primarily concentrated in its core areas of Pouce Coupe and Gordondale. At December 31, 2021, Birchcliff held 227.7 (214.2 net) sections of contiguous land that have potential for the Montney/Doig Resource Play in Pouce Coupe and Gordondale. The 2021 Reserves Report attributed proved plus probable reserves to 730.7 potential net future horizontal drilling locations in Pouce Coupe and Gordondale. In addition, at December 31, 2021, Birchcliff had approximately 3,084 potential net future horizontal drilling locations in Pouce Coupe and Gordondale that have not had any proved or probable reserves attributed to them by Deloitte. Based on Birchcliff's five year plan (announced on January 19, 2022), the Corporation is targeting drilling 170 to 180 wells in the next five years to achieve average annual production of 90,000 boe/d in 2026. Over the past few years, Birchcliff has worked diligently to divest non-core properties and to direct its production to

the Pouce Coupe Gas Plant and the AltaGas Facility, resulting in over 99% of Birchcliff's production being associated with Pouce Coupe and Gordondale at December 31, 2021.

Birchcliff also owns 179.5 (179.5 net) sections of land in the Elmworth area of Alberta with potential for the Montney/Doig Resource Play. At December 31, 2021, the Corporation had approximately 3,588 potential net future horizontal drilling locations in Elmworth that have not had any proved or probable reserves attributed to them by Deloitte. See "2021 Year-End Reserves" and "Advisories – Drilling Locations".

## ABBREVIATIONS

AECO	benchmark price for natural gas determined at the AECO 'C' hub in southeast Alberta
bbl	barrel
bbls	barrels
bbls/d	barrels per day
Bcf	billion cubic feet
boe	barrel of oil equivalent
boe/d	barrel of oil equivalent per day
C2+	ethane plus
C3+	propane plus
condensate	pentanes plus (C5+)
DCCET	drill, case, complete, equip and tie-in
F&D	finding and development
FD&A	finding, development and acquisition
FDC	future development costs
G&A	general and administrative
GAAP	generally accepted accounting principles for Canadian public companies, which are currently International Financial Reporting Standards as issued by the International Accounting Standards Board
GJ	gigajoule
GJ/d	gigajoules per day
HH	Henry Hub
Mbbls	thousand barrels
Mboe	thousand barrels of oil equivalent
Mcf	thousand cubic feet
Mcf/d	thousand cubic feet per day
MMboe	million barrels of oil equivalent
MMBtu	million British thermal units
MMBtu/d	million British thermal units per day
MMcf	million cubic feet
MMcf/d	million cubic feet per day
MSW	price for mixed sweet crude oil at Edmonton, Alberta
NGLs	natural gas liquids
NPV	net present value
NYMEX	New York Mercantile Exchange
OPEC	Organization of the Petroleum Exporting Countries
WTI	West Texas Intermediate, the reference price paid in U.S. dollars at Cushing, Oklahoma, for crude oil of standard grade
000s	thousands
\$000s	thousands of dollars

## NON-GAAP AND OTHER FINANCIAL MEASURES

This press release uses various "non-GAAP financial measures", "non-GAAP ratios", "supplementary financial measures" and "capital management measures" (as such terms are defined in NI 52-112), which are described in further detail below. These measures facilitate management's comparisons to the Corporation's historical operating results in assessing its results and strategic and operational decision-making and may be used by financial analysts and others in the oil and natural gas industry to evaluate the Corporation's performance.

### Non-GAAP Financial Measures

NI 52-112 defines a non-GAAP financial measure as a financial measure that: (i) depicts the historical or expected future financial performance, financial position or cash flow of an entity; (ii) with respect to its composition, excludes an amount that is included in, or includes an amount that is excluded from, the composition of the most directly comparable financial measure disclosed in the primary financial statements of the entity; (iii) is not disclosed in the financial statements of the entity; and (iv) is not a ratio, fraction, percentage or similar representation. The non-GAAP financial measures used in this press release are not standardized financial measures under GAAP and might not be comparable to similar measures presented by other companies where similar terminology is used. Investors are cautioned that non-GAAP financial measures

should not be construed as alternatives to or more meaningful than the most directly comparable GAAP measures as indicators of Birchcliff's performance. Set forth below is a description of the non-GAAP financial measures used in this press release.

### **Adjusted Funds Flow and Free Funds Flow**

Birchcliff defines "adjusted funds flow" as cash flow from operating activities before the effects of decommissioning expenditures and changes in non-cash operating working capital. Birchcliff eliminates settlements of decommissioning expenditures from cash flow from operating activities as the amounts can be discretionary and may vary from period to period depending on its capital programs and the maturity of its operating areas. The settlement of decommissioning expenditures is managed with Birchcliff's capital budgeting process which considers available adjusted funds flow. Changes in non-cash operating working capital are eliminated in the determination of adjusted funds flow as the timing of collection and payment are variable and by excluding them from the calculation, the Corporation believes that it is able to provide a more meaningful measure of its operations and ability to generate cash on a continuing basis. Adjusted funds flow can also be derived from petroleum and natural gas revenue less royalty expense, operating expense, transportation and other expense, net G&A expense, interest expense and any realized losses (plus realized gains) on financial instruments and plus any other cash income sources. Management believes that adjusted funds flow assists management and investors in assessing Birchcliff's financial performance after deducting all operating and corporate cash costs, as well as its ability to generate the cash necessary to fund sustaining and/or growth capital expenditures, repay debt, settle decommissioning obligations, repurchase common shares and pay common share and preferred share dividends.

Birchcliff defines "free funds flow" as adjusted funds flow less F&D capital expenditures. Management believes that free funds flow assists management and investors in assessing Birchcliff's ability to further generate shareholder returns through a number of initiatives, including but not limited to, potential debt repayment, preferred share redemptions, common share repurchases, dividend increases and acquisitions.

The following table provides a reconciliation of cash flow from operating activities, as determined in accordance with GAAP, to adjusted funds flow and free funds flow for the periods indicated:

	Three months ended		Twelve months ended	
	December 31,		December 31,	
(\$000s)	2021	2020	2021	2020
<b>Cash flow from operating activities</b>	<b>196,142</b>	<b>71,431</b>	<b>515,369</b>	<b>188,180</b>
Change in non-cash operating working capital	(4,255)	(6,269)	21,161	(5,977)
Decommissioning expenditures	1,762	1,347	3,203	2,323
<b>Adjusted funds flow</b>	<b>193,649</b>	<b>66,509</b>	<b>539,733</b>	<b>184,526</b>
F&D capital expenditures	(35,726)	(41,291)	(230,479)	(287,967)
<b>Free funds flow</b>	<b>157,923</b>	<b>25,218</b>	<b>309,254</b>	<b>(103,441)</b>

### **Transportation and Other Expense**

Birchcliff defines "transportation and other expense" as transportation expense plus marketing purchases less marketing revenue. Birchcliff may enter into certain marketing purchase and sales arrangements with the objective of reducing any available transportation and/or fractionation fees associated with its take-or-pay commitments. Management believes that transportation and other expense assists management and investors in assessing Birchcliff's total cost structure related to transportation activities. The following table provides a reconciliation of transportation expense, as determined in accordance with GAAP, to transportation and other expense for the periods indicated:

	Three months ended		Twelve months ended	
	December 31,		December 31,	
(\$000s)	2021	2020	2021	2020
Transportation expense	37,454	36,427	151,263	140,574
Marketing purchases	5,413	1,152	18,034	11,127
Marketing revenue	(6,169)	(1,889)	(20,722)	(13,687)
<b>Transportation and other expense</b>	<b>36,698</b>	<b>35,690</b>	<b>148,575</b>	<b>138,014</b>

### **Operating Netback**

Birchcliff defines "operating netback" as petroleum and natural gas revenue less royalty expense, operating expense and transportation and other expense. Management believes that operating netback assists management and investors in assessing Birchcliff's operating profits after deducting the cash costs that are directly associated with the sale of its production, which can then be used to pay other corporate cash costs or satisfy other obligations. The following table provides



a breakdown of Birchcliff's operating netback for the periods indicated:

(\$000s)	Three months ended December 31,		Twelve months ended December 31,	
	2021	2020	2021	2020
Petroleum and natural gas revenue	289,806	158,283	932,406	528,505
Royalty expense	(28,452)	(6,522)	(76,271)	(18,204)
Operating expense	(25,315)	(21,942)	(91,515)	(82,357)
Transportation and other expense	(36,698)	(35,690)	(148,575)	(138,014)
<b>Operating netback</b>	<b>199,341</b>	<b>94,129</b>	<b>616,045</b>	<b>289,930</b>

### FD&A and Total Capital Expenditures

Birchcliff defines "F&DA capital expenditures" as F&D capital expenditures (see "Advisories – F&D Capital Expenditures") plus acquisitions and less dispositions. Birchcliff defines "total capital expenditures" as FD&A capital expenditures plus administrative assets. Management believes that FD&A capital expenditures and total capital expenditures assist management and investors in assessing Birchcliff's overall capital cost structure associated with its petroleum and natural gas activities. The following table provides a reconciliation of F&D capital expenditures, as determined in accordance with GAAP, to FD&A capital expenditures and total capital expenditures for the periods indicated:

(\$000s)	Three months ended December 31,		Twelve months ended December 31,	
	2021	2020	2021	2020
F&D capital	35,726	41,291	230,479	287,967
Acquisitions	56	10	175	10
Dispositions	-	(12,902)	108	(12,887)
<b>FD&amp;A capital</b>	<b>35,782</b>	<b>28,399</b>	<b>230,762</b>	<b>275,090</b>
Administrative assets	293	379	1,718	1,695
<b>Total capital expenditures</b>	<b>36,075</b>	<b>28,778</b>	<b>232,480</b>	<b>276,785</b>

### Net Asset Value

Birchcliff defines "net asset value" as the net present value of the future net revenue of its PDP, total proved or total proved plus probable reserves, as the case may be, as estimated by Deloitte effective December 31, 2021 or 2020, using forecast prices and costs (before income taxes, discounted at 10%), plus the value of unexercised in-the-money stock options and performance warrants outstanding at the end of the period less total debt and the redemption value of the Series A and Series C preferred shares outstanding at the end of the period. Net asset value excludes any fair value assigned to Birchcliff's undeveloped land and seismic. Net asset value is normally referred to as a "produce-out" calculation under which the current value of the Corporation's reserves would be produced at forecast prices and costs. The value is a snapshot in time based on various assumptions, including commodity prices, future development capital and foreign exchange rates, that vary over time. Management believes that net asset value assists management and investors in assessing the long-term fair value of Birchcliff's underlying reserves assets after settling its outstanding financial obligations. The following table provides a reconciliation of net assets, as determined in accordance with GAAP, to net asset value for the periods indicated:

(\$000s)	Proved Developed Producing		Total Proved		Total Proved Plus Probable	
	2021	2020	2021	2020	2021	2020
Net assets <sup>(1)</sup>	2,852,232	2,833,310	2,852,232	2,833,310	2,852,232	2,833,310
Reserves adjustment <sup>(2)</sup>	(362,026)	(963,864)	2,114,688	902,927	3,515,052	1,998,383
Total debt	(499,397)	(761,951)	(499,397)	(761,951)	(499,397)	(761,951)
Preferred shares <sup>(3)</sup>	(88,268)	(89,930)	(88,268)	(89,930)	(88,268)	(89,930)
Value of unexercised securities	50,392	-	50,392	-	50,392	-
<b>Net asset value</b>	<b>1,952,933</b>	<b>1,017,565</b>	<b>4,429,647</b>	<b>2,884,356</b>	<b>5,830,011</b>	<b>3,979,812</b>

(1) Reflects the net assets of the Corporation, which is determined on a historical cost basis and is calculated as total assets less total liabilities as disclosed on the financial statements.

(2) Represents the difference between the net present value of future net revenue (before income taxes, discounted at 10%) of Birchcliff's PDP, total proved and total proved plus probable reserves, as the case may be, and the net assets disclosed on the financial statements.

(3) Represents the redemption value of the Corporation's Series A and Series C preferred shares.

### Effective Sales – Total Corporate, Total Natural Gas, AECO Market and NYMEX HH Market

Birchcliff defines "effective sales" in the AECO market and NYMEX HH market as the sales amount received from the production of natural gas that is effectively attributed to the AECO and NYMEX HH market pricing, respectively, and does not consider the physical sales delivery point in each case. Effective sales in the NYMEX HH market includes realized gains and

losses on financial instruments and excludes the notional fixed basis costs associated with the underlying financial contract in the period. Birchcliff defines “effective total natural gas sales” as the aggregate of the effective sales amount received in each natural gas market. Birchcliff defines “effective total corporate sales” as the aggregate of the effective total natural gas sales and the sales amount received from the production of light oil, condensate and NGLs. Management believes that disclosing effective sales for each natural gas market assists management and investors in assessing Birchcliff’s natural gas diversification and commodity price exposure to each market. The following table provides a reconciliation of natural gas sales, as determined in accordance with GAAP, to effective total natural gas sales and effective total corporate sales for the periods indicated:

(\$000s)	Three months ended December 31	
	2021	2020 <sup>(1)</sup>
Natural gas sales	192,553	97,293
Realized gain (loss) on financial instruments	11,531	(10,232)
Notional fixed basis costs <sup>(2)</sup>	21,687	23,090
<b>Effective total natural gas sales</b>	<b>225,771</b>	<b>110,151</b>
Light oil sales	22,232	16,261
Condensate sales	48,377	32,406
NGLs sales	26,634	12,320
<b>Effective total corporate sales</b>	<b>323,014</b>	<b>171,138</b>

(1) Prior period amounts have been adjusted to include the aggregate notional fixed basis cost for comparison purposes.

(2) Reflects the aggregate notional fixed basis cost associated with Birchcliff’s financial and physical NYMEX HH/AECO 7A basis swaps in the period.

### Non-GAAP Ratios

NI 52-112 defines a non-GAAP ratio as a financial measure that: (i) is in the form of a ratio, fraction, percentage or similar representation; (ii) has a non-GAAP financial measure as one or more of its components; and (iii) is not disclosed in the financial statements of the entity. The non-GAAP ratios used in this press release are not standardized financial measures under GAAP and might not be comparable to similar measures presented by other companies where similar terminology is used. Set forth below is a description of the non-GAAP ratios used in this press release.

#### **Adjusted Funds Flow Per Boe and Adjusted Funds Flow Per Basic Common Share**

Birchcliff calculates “adjusted funds flow per boe” as aggregate adjusted funds flow in the period divided by the production (boe) in the period. Management believes that adjusted funds flow per boe assists management and investors in assessing Birchcliff’s financial profitability and sustainability on a cash basis by isolating the impact of production volumes to better analyze its performance against prior periods on a comparable basis. The Corporation previously referred to adjusted funds flow per boe as “adjusted funds flow netback”.

Birchcliff calculates “adjusted funds flow per basic common share” as aggregate adjusted funds flow in the period divided by the basic common shares outstanding at the end of the period. Management believes that adjusted funds flow per basic common share assists management and investors in assessing Birchcliff’s financial strength on a per common share basis.

#### **Free Funds Flow Per Basic Common Share**

Birchcliff calculates “free funds flow per basic common share” as aggregate free funds flow in the period divided by the basic common shares outstanding at the end of the period. Management believes that free fund flow per basic common share assists management and investors in assessing Birchcliff’s financial strength and its ability to generate shareholder returns on a per common share basis.

#### **Transportation and Other Expense Per Boe**

Birchcliff calculates “transportation and other expense per boe” as aggregate transportation and other expense in the period divided by the production (boe) in the applicable period. Management believes that transportation and other expense per boe assists management and investors in assessing Birchcliff’s cost structure as it relates to its transportation and marketing activities by isolating the impact of production volumes to better analyze performance against prior periods on a comparable basis.

#### **Operating Netback Per Boe**

Birchcliff calculates “operating netback per boe” as aggregate operating netback in the period divided by the production (boe) in the period. Management believes that operating netback per boe assists management and investors in assessing Birchcliff’s

operating profitability and sustainability by isolating the impact of production volumes to better analyze its performance against prior periods on a comparable basis.

#### **Operating Netback Recycle Ratio and Adjusted Funds Flow Recycle Ratio**

Birchcliff calculates “recycle ratios” as operating netback per boe or adjusted funds flow per boe in the period, as the case may be, divided by F&D costs in the period. Management believes that recycle ratios assist management and investors in assessing Birchcliff’s ability to profitably find and develop its PDP, proved and proved plus probable reserves.

#### **Net Asset Value Per Basic Common Share**

Birchcliff calculates “net asset value per basic common share” as the net asset value in each category of reserves divided by the aggregate of the basic common shares and in-the money dilutive common shares attributable to stock options and performance warrants outstanding at the end of the period. Management believes that net asset value per basic common share assists management and investors in comparing Birchcliff’s common share trading price to the underlying fair market value of its net assets on a per common share basis.

#### **Effective Average Realized Sales Price – Total Corporate, Total Natural Gas, AECO Market and NYMEX HH Market**

Birchcliff calculates “effective average realized sales price” as effective sales, in each of total corporate, total natural gas, AECO market and NYMEX HH market, as the case may be, divided by the effective production in each of the markets during the period. Management believes that disclosing effective average realized sales price for each natural gas market assists management and investors in comparing Birchcliff’s commodity price realizations in each natural gas market on a per unit basis.

#### **Supplementary Financial Measures**

NI 52-112 defines a supplementary financial measure as a financial measure that: (i) is, or is intended to be, disclosed on a periodic basis to depict the historical or expected future financial performance, financial position or cash flow of an entity; (ii) is not disclosed in the financial statements of the entity; (iii) is not a non-GAAP financial measure; and (iv) is not a non-GAAP ratio. The supplementary financial measures used in this press release are either a per unit disclosure of a corresponding GAAP measure, or a component of a corresponding GAAP measure, presented in the financial statements. Supplementary financial measures that are disclosed on a per unit basis are calculated by dividing the aggregate GAAP measure (or component thereof) by the applicable unit for the period. Supplementary financial measures that are disclosed on a component basis of a corresponding GAAP measure are a granular representation of a financial statement line item and are determined in accordance with GAAP.

#### **Capital Management Measures**

NI 52-112 defines a capital management measure as a financial measure that: (i) is intended to enable an individual to evaluate an entity’s objectives, policies and processes for managing the entity’s capital; (ii) is not a component of a line item disclosed in the primary financial statements of the entity; (iii) is disclosed in the notes to the financial statements of the entity; and (iv) is not disclosed in the primary financial statements of the entity. Set forth below is a description of the capital management measure used in this press release.

#### **Total Debt**

Birchcliff calculates “total debt” as the amount outstanding under the Corporation’s revolving term credit facilities plus adjusted working capital deficit (surplus). Management believes that total debt assists management and investors in assessing Birchcliff’s overall liquidity and financial position at the end of the period. The following table provides a reconciliation of the revolving term credit facilities, as determined in accordance with GAAP, to total debt:

<b>As at, (\$000s)</b>	<b>December 31, 2021</b>	<b>December 31, 2020</b>
Revolving term credit facilities	500,870	731,372
Working capital deficit	53,312	93,988
Fair value of financial instruments	(16,517)	(23,479)
Capital securities	(38,268)	(39,930)
Adjusted working capital deficit (surplus) <sup>(1)(2)</sup>	(1,473)	30,579
<b>Total debt<sup>(2)</sup></b>	<b>499,397</b>	<b>761,951</b>

- (1) Capital management measure. Management believes that adjusted working capital deficit (surplus) assists management and investors in assessing Birchcliff's short-term liquidity requirements.
- (2) Previously classified as a non-GAAP measure under CSA Staff Notice 52-306 – *Non-GAAP Financial Measures*.

## **PRESENTATION OF OIL AND GAS RESERVES**

Deloitte prepared the 2020 Reserves Report and the 2021 Reserves Report. In addition, Deloitte and McDaniel prepared reserves evaluations in respect of Birchcliff's oil and natural gas properties effective December 31, 2019. Such evaluations were prepared in accordance with the standards contained in NI 51-101 and the COGE Handbook that were in effect at the relevant time. Reserves estimates stated herein are extracted from the relevant evaluation.

There are numerous uncertainties inherent in estimating quantities of oil, natural gas and NGLs reserves and the future net revenue attributed to such reserves. The reserves and associated future net revenue information set forth in this press release are estimates only. In general, estimates of economically recoverable oil, natural gas and NGLs reserves and the future net revenue therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserves recovery, the timing and amount of capital expenditures, marketability of oil, natural gas and NGLs, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For these reasons, estimates of the economically recoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the classification of such reserves based on risk of recovery and estimates of future net revenue associated with reserves prepared by different engineers, or by the same engineer at different times, may vary. Birchcliff's actual production, revenue, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations could be material.

It should not be assumed that the undiscounted or discounted net present value of future net revenue attributable to the Corporation's reserves estimated by the Corporation's independent qualified reserves evaluator represent the fair market value of those reserves. There is no assurance that the forecast prices and costs assumptions will be attained and variances could be material. Actual oil, natural gas and NGLs reserves may be greater than or less than the estimates provided herein and variances could be material. With respect to the disclosure of reserves contained herein relating to portions of Birchcliff's properties, the estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation.

In this press release, unless otherwise stated all references to "reserves" are to Birchcliff's gross company reserves (Birchcliff's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Birchcliff).

The information set forth in this press release relating to the reserves, future net revenue and future development costs of Birchcliff constitutes forward-looking statements and is subject to certain risks and uncertainties. See "*Advisories – Forward-Looking Statements*".

Certain terms used herein but not defined are defined in NI 51-101, CSA Staff Notice 51-324 – *Revised Glossary to NI 51-101 Standards of Disclosure for Oil and Gas Activities ("CSA Staff Notice 51-324")* and/or the COGE Handbook and, unless the context otherwise requires, shall have the same meanings herein as in NI 51-101, CSA Staff Notice 51-324 and the COGE Handbook, as the case may be.

## **ADVISORIES**

### **Unaudited Information**

All financial and operating information contained in this press release for the fourth quarter and year ended December 31, 2021, such as F&D costs, recycle ratio, net asset value, adjusted funds flow, F&D capital expenditures, free funds flow, operating expense, total debt and production information, is based on unaudited estimated results and have not been reviewed by the Corporation's auditor. These estimated results are subject to change upon completion of the audited financial statements for the year ended December 31, 2021, and changes could be material. Birchcliff anticipates filing its audited financial statements and related management's discussion and analysis for the year ended December 31, 2021 on SEDAR on March 16, 2022.

### **Currency**

Unless otherwise indicated, all dollar amounts are expressed in Canadian dollars and all references to "\$" and "CDN\$" are to Canadian dollars and all references to "US\$" are to United States dollars.

## Boe Conversions

Boe amounts have been calculated by using the conversion ratio of 6 Mcf of natural gas to 1 bbl of oil. Boe amounts may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

## MMBtu Pricing Conversions

\$1.00 per MMBtu equals \$1.00 per Mcf based on a standard heat value Mcf.

## Oil and Gas Metrics

This press release contains metrics commonly used in the oil and natural gas industry, including F&D costs, reserves life index, reserves replacement, recycle ratio, net asset value and netbacks, which have been determined by Birchcliff as set out below. These oil and gas metrics do not have any standardized meanings or standard methods of calculation and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. As such, they should not be used to make comparisons. Management uses these oil and gas metrics for its own performance measurements and to provide shareholders with measures to compare Birchcliff's performance over time; however, such measures are not reliable indicators of Birchcliff's future performance, which may not compare to Birchcliff's performance in previous periods, and therefore should not be unduly relied upon.

- With respect to F&D costs:
  - F&D costs for PDP, proved or proved plus probable reserves, as the case may be, are calculated by taking the sum of: (i) exploration and development costs (F&D capital expenditures) incurred in the period; and (ii) where appropriate, the change during the period in FDC for the reserves category; divided by the change to the reserves category before production during the period. F&D costs exclude the effects of acquisitions and dispositions.
  - In calculating the amounts of F&D costs for a year, the changes during the year in estimated reserves and estimated FDC are based upon the evaluations of Birchcliff's reserves prepared by its independent qualified reserves evaluators, effective December 31 of such year.
  - The aggregate of the exploration and development costs incurred in the most recent financial year and any change during that year in estimated FDC generally will not reflect total F&D costs related to reserves additions for that year.
  - F&D costs may be used as a measure of a company's efficiency with respect to finding and developing its reserves.
- Reserves life index is calculated by dividing PDP, proved or proved plus probable reserves, as the case may be, estimated by Birchcliff's independent qualified reserves evaluator at December 31, 2021, by the mid-point of the average annual production guidance range for the period indicated. Reserves life index may be used as a measure of a company's sustainability.
- Reserves replacement is calculated by dividing PDP, proved or proved plus probable reserves additions, as the case may be, before production by total annual production in the applicable period. Reserves replacement may be used as a measure of a company's sustainability and its ability to replace its PDP reserves, proved reserves or proved plus probable reserves, as the case may be.
- For information regarding recycle ratios and how such metrics are calculated, see *"Non-GAAP and Other Financial Measures"*.
- For information regarding net asset value and how such metric is calculated, see *"Non-GAAP and Other Financial Measures"*.
- For information regarding netbacks and how such metrics are calculated, see *"Non-GAAP and Other Financial Measures"*.

## Drilling Locations

This press release discloses potential net future horizontal drilling locations, specifically: (i) in Pouce Coupe and Gordondale, 730.7 potential net future horizontal drilling locations to which proved plus probable reserves have been attributed by Deloitte, and approximately 3,084 unbooked potential net future horizontal drilling locations; and (ii) in Elmworth, approximately 3,588 unbooked potential net future horizontal drilling locations.

Proved plus probable locations consist of proposed drilling locations identified in the 2021 Reserves Report that have proved and/or probable reserves, as applicable, attributed to them. Unbooked locations are internal estimates based on Birchcliff's prospective acreage and an assumption as to the number of wells that can be drilled per section based on industry practice and internal technical analysis review. Unbooked locations have been identified by management as an estimate of Birchcliff's multi-year drilling activities based on evaluation of applicable geologic, seismic, engineering, production and reserves information. Unbooked locations do not have proved or probable reserves attributed to them in the 2021 Reserves Report.

Birchcliff's ability to drill and develop these locations and the drilling locations on which Birchcliff actually drills wells depends on a number of uncertainties and factors, including, but not limited to, the availability of capital, equipment and personnel, oil and natural gas prices, costs, inclement weather, seasonal restrictions, drilling results, additional geological, geophysical and reservoir information that is obtained, production rate recovery, gathering system and transportation constraints, the net price received for commodities produced, regulatory approvals and regulatory changes. As a result of these uncertainties, there can be no assurance that the potential future drilling locations that Birchcliff has identified will ever be drilled and, if drilled, that such locations will result in additional oil, NGLs or natural gas production and, in the case of unbooked locations, additional reserves. As such, Birchcliff's actual drilling activities may differ materially from those presently identified, which could adversely affect Birchcliff's business. While certain of the unbooked drilling locations have been de-risked by drilling existing wells in relatively close proximity to such unbooked drilling locations, some of the other unbooked drilling locations are farther away from existing wells, where management has less information about the characteristics of the reservoir and there is therefore more uncertainty whether wells will be drilled in such locations and, if drilled, there is more uncertainty that such wells will result in additional proved or probable reserves, resources or production.

### **Production**

With respect to the disclosure of Birchcliff's production contained in this press release: (i) references to "light oil" mean "light crude oil and medium crude oil" as such term is defined in NI 51-101; (ii) except where otherwise stated, references to "liquids" mean "light crude oil and medium crude oil" and "natural gas liquids" (including condensate) as such terms are defined in NI 51-101; and (iii) references to "natural gas" mean "shale gas", which also includes an immaterial amount of "conventional natural gas", as such terms are defined in NI 51-101. In addition, NI 51-101 includes condensate within the product type of natural gas liquids. In certain cases, Birchcliff has disclosed condensate separately from other natural gas liquids as the price of condensate as compared to other natural gas liquids is currently significantly higher and Birchcliff believes presenting the two commodities separately provides a more accurate description of its operations and results therefrom.

### **F&D Capital Expenditures**

Unless otherwise stated, references in this press release to "F&D capital expenditures" denotes capital for land, seismic, workovers, drilling and completions and well equipment and facilities and excludes any net acquisitions and dispositions, administrative assets and the capitalized portion of annual cash incentive payments that have not been approved by the board of directors. Management believes that F&D capital expenditures assists management and investors in assessing Birchcliff capital cost outlay associated with its exploration and development activities for the purposes of finding and developing its reserves.

### **Forward-Looking Statements**

Certain statements contained in this press release constitute forward-looking statements and forward-looking information (collectively referred to as "**forward-looking statements**") within the meaning of applicable Canadian securities laws. The forward-looking statements contained in this press release relate to future events or Birchcliff's future plans, strategy, operations, performance or financial position and are based on Birchcliff's current expectations, estimates, projections, beliefs and assumptions. Such forward-looking statements have been made by Birchcliff in light of the information available to it at the time the statements were made and reflect its experience and perception of historical trends. All statements and information other than historical fact may be forward-looking statements. Such forward-looking statements are often, but not always, identified by the use of words such as "seek", "plan", "focus", "future", "outlook", "position", "expect", "project", "intend", "believe", "anticipate", "estimate", "forecast", "guidance", "potential", "proposed", "predict", "budget", "continue", "targeting", "may", "will", "could", "might", "should", "would", "on track" and other similar words and expressions.

By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Accordingly, readers are cautioned not to place undue reliance on such forward-looking statements. Although Birchcliff believes that the expectations reflected in the forward-looking statements are reasonable, there can be no assurance that such expectations

will prove to be correct and Birchcliff makes no representation that actual results achieved will be the same in whole or in part as those set out in the forward-looking statements.

In particular, this press release contains forward-looking statements relating to the following:

- Birchcliff's plans and other aspects of its anticipated future financial performance, results of operations, focus, objectives, strategies, opportunities, priorities and goals, including: statements regarding Birchcliff's 2022 guidance and outlook (including: that in 2022, Birchcliff remains committed to maintaining capital discipline, maximizing free funds flow generation and significantly reducing indebtedness; that free funds flow generated in 2022 will be primarily allocated towards debt reduction; and Birchcliff's adjusted funds flow, F&D capital expenditures, free funds flow, total debt and production guidance for 2022); statements under the heading "*Operations Update*" and elsewhere in this press release regarding Birchcliff's 2022 capital program and exploration, production and development activities (including that the wells on the 13-29 pad are expected to be onstream in early March 2022); and statements regarding Birchcliff's five year plan (including that the Corporation is targeting drilling 170 to 180 wells in the next five years to achieve average annual production of 90,000 boe/d in 2026);
- the performance and other characteristics of Birchcliff's oil and natural gas properties and expected results from its assets (including statements regarding the potential or prospectivity of Birchcliff's properties) and estimates of potential future drilling locations and opportunities;
- the information set forth under the heading "*2021 Year-End Reserves*" and elsewhere in this press release relating to the Corporation's reserves (including: estimates of reserves; estimates of the net present values of future net revenue associated with Birchcliff's reserves; forecasts for prices, inflation and exchange rates; FDC; and reserves life index); and
- that Birchcliff anticipates filing its annual information form and audited financial statements and related management's discussion and analysis for the year ended December 31, 2021 on March 16, 2022.

Information relating to reserves is forward-looking as it involves the implied assessment, based on certain estimates and assumptions, that the reserves exist in the quantities predicted or estimated and that the reserves can profitably be produced in the future. See "*Presentation of Oil and Gas Reserves*".

With respect to the forward-looking statements contained in this press release, assumptions have been made regarding, among other things: the degree to which the Corporation's results of operations and financial condition will be disrupted by circumstances attributable to the COVID-19 pandemic; prevailing and future commodity prices and differentials, exchange rates, interest rates, inflation rates, royalty rates and tax rates; the state of the economy, financial markets and the exploration, development and production business; the political environment in which Birchcliff operates; the regulatory framework regarding royalties, taxes, environmental, climate change and other laws; the Corporation's ability to comply with existing and future environmental, climate change and other laws; future cash flow, debt and dividend levels; future operating, transportation, G&A and other expenses; Birchcliff's ability to access capital and obtain financing on acceptable terms; the timing and amount of capital expenditures and the sources of funding for capital expenditures and other activities; the sufficiency of budgeted capital expenditures to carry out planned operations; the successful and timely implementation of capital projects and the timing, location and extent of future drilling and other operations; results of operations; Birchcliff's ability to continue to develop its assets and obtain the anticipated benefits therefrom; the performance of existing and future wells; reserves volumes and Birchcliff's ability to replace and expand reserves through acquisition, development or exploration; the impact of competition on Birchcliff; the availability of, demand for and cost of labour, services and materials; the ability to obtain any necessary regulatory or other approvals in a timely manner; the satisfaction by third parties of their obligations to Birchcliff; the ability of Birchcliff to secure adequate processing and transportation for its products; Birchcliff's ability to successfully market natural gas and liquids; the results of the Corporation's risk management and market diversification activities; and Birchcliff's natural gas market exposure. In addition to the foregoing assumptions, Birchcliff has made the following assumptions with respect to certain forward-looking statements contained in this press release:

- Birchcliff's 2022 guidance and five year plan assume the following commodity prices and exchange rate: an average WTI price of US\$76.00/bbl; an average WTI-MSW differential of CDN\$5.00/bbl; an average AECO price of CDN\$3.50/GJ; an average Dawn price of US\$3.90/MMBtu; an average NYMEX HH price of US\$4.00/MMBtu; and an exchange rate (CDN\$ to US\$1) of 1.26.
- With respect to estimates of capital expenditures for 2022, such estimates assume that the 2022 capital program will be carried out as currently contemplated. The amount and allocation of capital expenditures for exploration and development activities by area and the number and types of wells to be drilled and brought on production is dependent upon results achieved and is subject to review and modification by management on an ongoing basis throughout the

year. Actual spending may vary due to a variety of factors, including commodity prices, economic conditions, results of operations and costs of labour, services and materials.

- With respect to Birchcliff's estimates of adjusted and free funds flow for 2022, such estimates assume that: the 2022 capital program will be carried out as currently contemplated and the level of capital spending for 2022 set forth herein will be achieved; and the targets for production, production commodity mix, expenses and natural gas market exposure and the commodity price and exchange rate assumptions are met.
- With respect to Birchcliff's estimate of total debt for 2022, such estimate assumes that: (i) any free funds flow remaining after the payment of dividends, asset retirement obligations and other amounts for administrative assets, financing fees and capital lease obligations is allocated towards debt reduction; (ii) the timing of common share and preferred share dividends paid by the Corporation remains consistent with previous years, with the dividend rates and applicable taxes remaining unchanged; (iii) there are approximately 265 million common, 2,000,000 series A preferred shares and 1,530,709 series C preferred shares outstanding, with no redemptions of the Series A or the Series C preferred shares or buybacks of common shares occurring during 2022; (iv) no significant acquisitions are completed by the Corporation and there is no repayment of debt using the proceeds from asset dispositions or equity issuances; (v) there are no proceeds received from the exercise of stock options or performance warrants during 2022; (vi) the 2022 capital program will be carried out as currently contemplated and the level of capital spending set forth herein will be achieved; and (vii) the targets for production, production commodity mix, capital expenditures, adjusted funds flow, free funds flow and natural gas market exposure and the commodity price and exchange rate assumptions are met. Birchcliff's 2022 total debt estimate does not include the payment of annual cash incentive payments that have not been approved by Birchcliff's board of directors.
- With respect to Birchcliff's production guidance for 2022 and forecast production estimates in Birchcliff's five year plan, such guidance assumes that: the Corporation's capital programs will be carried out as currently contemplated; no unexpected outages occur in the infrastructure that Birchcliff relies on to produce its wells and that any transportation service curtailments or unplanned outages that occur will be short in duration or otherwise insignificant; the construction of new infrastructure meets timing and operational expectations; existing wells continue to meet production expectations; and future wells scheduled to come on production meet timing, production and capital expenditure expectations.
- With respect to statements of future wells to be drilled and brought on production and estimates of potential future drilling locations and opportunities, such statements assume: the continuing validity of the geological and other technical interpretations performed by Birchcliff's technical staff, which indicate that commercially economic volumes can be recovered from Birchcliff's lands as a result of drilling future wells; and that commodity prices and general economic conditions will warrant proceeding with the drilling of such wells.
- With respect to estimates of reserves volumes and the net present values of future net revenue associated with Birchcliff's reserves, the key assumption is the validity of the data used by Deloitte in the 2021 Reserves Report.

Birchcliff's actual results, performance or achievements could differ materially from those anticipated in the forward-looking statements as a result of both known and unknown risks and uncertainties including, but not limited to: the risks posed by pandemics (including COVID-19) and epidemics and their impacts on supply and demand and commodity prices; actions taken by OPEC and other major producers of crude oil and the impact such actions may have on supply and demand and commodity prices; general economic, market and business conditions which will, among other things, impact the demand for and market prices of Birchcliff's products and Birchcliff's access to capital; volatility of crude oil and natural gas prices; fluctuations in exchange and interest rates; stock market volatility; loss of market demand; an inability to access sufficient capital from internal and external sources on terms acceptable to the Corporation; risks associated with Birchcliff's credit facilities, including a failure to comply with covenants under the agreement governing the credit facilities and the risk that the borrowing base limit may be redetermined; fluctuations in the costs of borrowing; operational risks and liabilities inherent in oil and natural gas operations; the occurrence of unexpected events such as fires, severe weather, explosions, blow-outs, equipment failures, transportation incidents and other similar events; an inability to access sufficient water or other fluids needed for operations; uncertainty that development activities in connection with Birchcliff's assets will be economic; an inability to access or implement some or all of the technology necessary to operate its assets and achieve expected future results; the accuracy of estimates of reserves, future net revenue and production levels; geological, technical, drilling, construction and processing problems; uncertainty of geological and technical data; horizontal drilling and completions techniques and the failure of drilling results to meet expectations for reserves or production; uncertainties related to Birchcliff's future potential drilling locations; delays or changes in plans with respect to exploration or development projects



or capital expenditures; the accuracy of cost estimates and variances in Birchcliff's actual costs and economic returns from those anticipated; incorrect assessments of the value of acquisitions and exploration and development programs; changes to the regulatory framework in the locations where the Corporation operates, including changes to tax laws, Crown royalty rates, environmental laws, climate change laws, carbon tax regimes, incentive programs and other regulations that affect the oil and natural gas industry; actions by government authorities, including those with respect to the COVID-19 pandemic; an inability of the Corporation to comply with existing and future environmental, climate change and other laws; the cost of compliance with current and future environmental laws; political uncertainty and uncertainty associated with government policy changes; dependence on facilities, gathering lines and pipelines; uncertainties and risks associated with pipeline restrictions and outages to third-party infrastructure that could cause disruptions to production; the lack of available pipeline capacity and an inability to secure adequate and cost-effective processing and transportation for Birchcliff's products; an inability to satisfy obligations under Birchcliff's firm marketing and transportation arrangements; shortages in equipment and skilled personnel; the absence or loss of key employees; competition for, among other things, capital, acquisitions of reserves, undeveloped lands, equipment and skilled personnel; management of Birchcliff's growth; environmental and climate change risks, claims and liabilities; potential litigation; default under or breach of agreements by counterparties and potential enforceability issues in contracts; claims by Indigenous peoples; the reassessment by taxing or regulatory authorities of the Corporation's prior transactions and filings; unforeseen title defects; third-party claims regarding the Corporation's right to use technology and equipment; uncertainties associated with the outcome of litigation or other proceedings involving Birchcliff; uncertainties associated with counterparty credit risk; risks associated with Birchcliff's risk management and market diversification activities; risks associated with the declaration and payment of future dividends, including the discretion of Birchcliff's board of directors to declare dividends and change the Corporation's dividend policy; the failure to obtain any required approvals in a timely manner or at all; the failure to complete or realize the anticipated benefits of acquisitions and dispositions and the risk of unforeseen difficulties in integrating acquired assets into Birchcliff's operations; negative public perception of the oil and natural gas industry and fossil fuels; the Corporation's reliance on hydraulic fracturing; market competition, including from alternative energy sources; changing demand for petroleum products; the availability of insurance and the risk that certain losses may not be insured; breaches or failure of information systems and security (including risks associated with cyber-attacks); risks associated with the ownership of the Corporation's securities; and the accuracy of the Corporation's accounting estimates and judgments.

Readers are cautioned that the foregoing lists of factors are not exhaustive. Additional information on these and other risk factors that could affect results of operations, financial performance or financial results are included in Birchcliff's most recent Annual Information Form under the heading "*Risk Factors*" and in other reports filed with Canadian securities regulatory authorities.

This press release contains information that may constitute future-orientated financial information or financial outlook information (collectively, "**FOFI**") about Birchcliff's prospective financial performance, financial position or cash flows, all of which is subject to the same assumptions, risk factors, limitations and qualifications as set forth above. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise or inaccurate and, as such, undue reliance should not be placed on FOFI. Birchcliff's actual results, performance and achievements could differ materially from those expressed in, or implied by, FOFI. Birchcliff has included FOFI in order to provide readers with a more complete perspective on Birchcliff's future operations and management's current expectations relating to Birchcliff's future performance. Readers are cautioned that such information may not be appropriate for other purposes. FOFI contained herein was made as of the date of this press release. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any FOFI statements, whether as a result of new information, future events or otherwise.

Management has included the above summary of assumptions and risks related to forward-looking statements provided in this press release in order to provide readers with a more complete perspective on Birchcliff's future operations and management's current expectations relating to Birchcliff's future performance. Readers are cautioned that this information may not be appropriate for other purposes.

The forward-looking statements contained in this press release are expressly qualified by the foregoing cautionary statements. The forward-looking statements contained herein are made as of the date of this press release. Unless required

by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

**About Birchcliff:**

Birchcliff is a Calgary, Alberta based intermediate oil and natural gas company with operations focused on the Montney/Doig Resource Play in Alberta. Birchcliff's common shares and Series A and Series C preferred shares are listed for trading on the Toronto Stock Exchange under the symbols "BIR", "BIR.PR.A" and "BIR.PR.C", respectively.

**For further information, please contact:**

**Birchcliff Energy Ltd.**

Suite 1000, 600 – 3<sup>rd</sup> Avenue S.W.

Calgary, Alberta T2P 0G5

Telephone: (403) 261-6401

Email: [info@birchcliffenergy.com](mailto:info@birchcliffenergy.com)

[www.birchcliffenergy.com](http://www.birchcliffenergy.com)

**Jeff Tonken** – Chief Executive Officer

**Chris Carlsen** – President and Chief Operating Officer

**Bruno Geremia** – Executive Vice President and Chief Financial Officer